COMP9323: **Software as Service Project**

Phases 2, Software Prototyping and Implementation (prototype version1, Data, Architecture, Peer-review, Presentation)

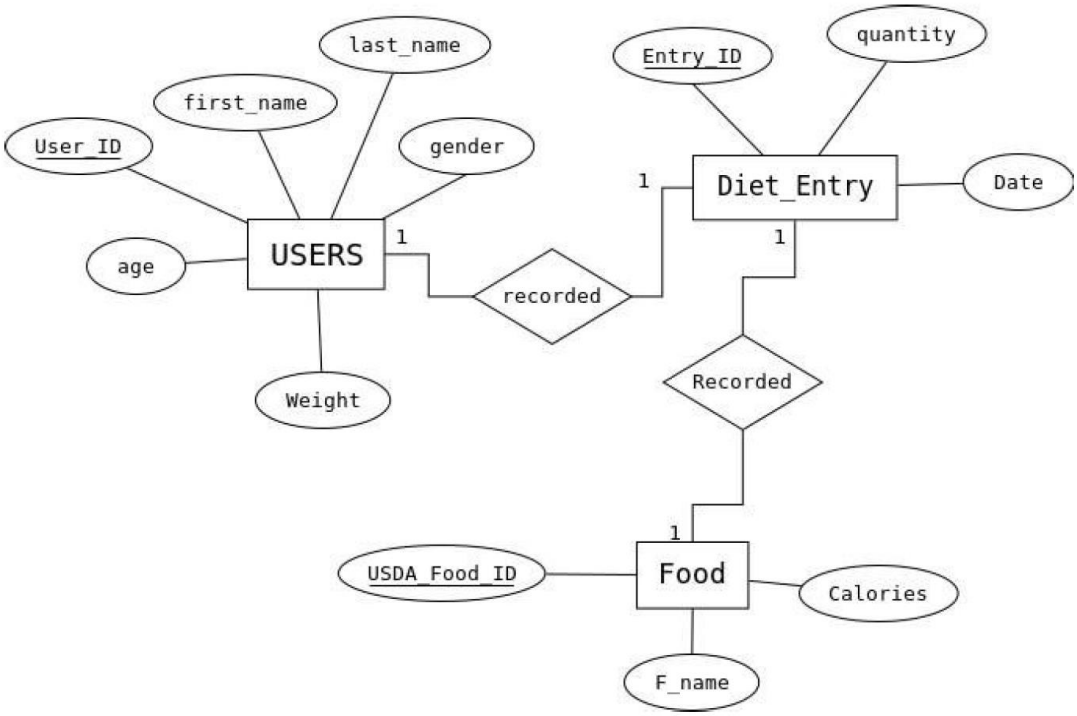
Guidelines and submission instructions

1. Deliverables

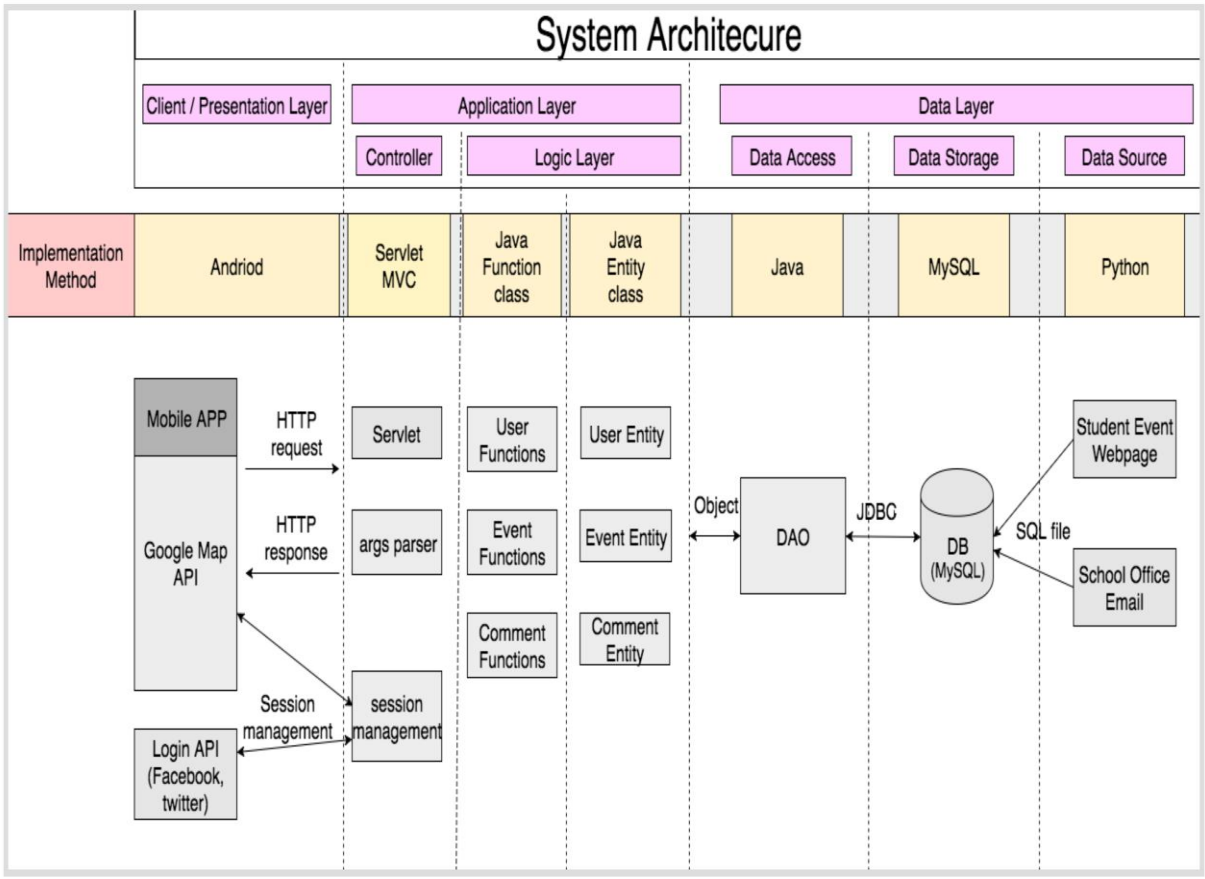
Overall Aim: In these phases of this course, you will be required to make a class-wide presentation of your project (Week 9); as well as submit data model and software architecture of your software prototype (Week 8). Review and provide feedback to other students' work (Start of Week 10);
In particular, this ultimate phase can be organised in the following parts:

Deliverable one: System Design (Week 8). The first this phase will require you to design the main elements of the application, or service; this includes both back-end and/or front-end components. This part of the phase, thus serves to address **"how"** your project will be implemented. At the very least, each project should design and present:

(i) an *entity-relationship (ER) model* of data layer. As the example below:



(ii) *system architectural diagram*, showing the main system components and interactions (e.g., MVC – Model View Controller System Components)



- ***Deliverable 2 - Project presentation (Week 9).*** Presentation shall be within time (15 for presentation + 5 minutes for questions). Each group is expected to provide a presentation of your project:

    - To summarise the main objective of the project
    - To summarise the significance and innovation of the project
    - To summarise and illustrate the main features of the implemented system
    - To summarise the system architecture (system components, their interactions, used technologies)
    - To summarise your experience undertaking your project: what you feel you have learnt during the course of your project? What suggestions could you propose for improving this?
    - Expect to answer questions related to your project in general by your peers, mentors.

- ***Deliverable 3*** **- Peer-Review of another Group Project (start of Week10).** Each student will be required to provide a written critical review of another group's work based on presentation given by groups on Week 9. The review is a 1-page or 2-pages document that addresses the following review criteria:

    - Critique of the presentation, considering both positive and negative perspectives with accompanying explanations and arguments;

- Critique of of the API and/or UI of the system features, considering both positive and negative perspectives with accompanying explanations and arguments (e.g., state the innovative and well designed features, features that require improvements, missing features, etc)

The feedback will be assessed based on the "*usefulness* of the review". The review process imparts great benefit: Both, to the reviewed group providing useful feedback; while to the reviewer it provides a meaningful learning experience in understanding how to thoroughly probe, test and appropriately critique a presentation.

2. Other General Guidelines:

- This phase is about producing a first prototype of a software that implements requirements identified in phase 1
- The design which comprises a data model and an architecture are 2 artefacts (e.g., ER or UML class diagrams). These important artefacts to understand that data used in the system, the components that are implemented (e.g., UI and backend) and interactions between them. No need to submit textual descriptions of these diagrams as you will be presenting them during presentation of week 9.
- Be aware, that while in general requirements and design should be agreed upon and expected to be abided – you may nonetheless expect that in some cases requirements and design evolve and might be updated during the implementation phase. Likewise, it is thus important to heed great care during this phase, to establish a set of design elements, to ensure development begins on good foundations.

3. Marking Scheme

PART	Excellent	Satisfactory	Poor
System Design. ***[25%]***	Adequate system design provided, that reflects upon the requirements/features earlier specified. No gaps in system design. Shows evidence of foresight into "how" the system will be implemented. Uses appropriate diagrams, incl. ER and/or UML, as well as an illustration of the architecture.	System design provided but shows possible gaps. E.g. features and requirements that are described are not reflected in the system design.	Insufficient level of detail of the system design; does not reflect foresight as to how the intended system would be implement. And/or employs an incorrect or inadequate set of diagrams.
Presentation ***[50%]***	• Clearly describes the underlying problem that the project sought to tackle; • Explains the proposed solutions and main outcomes of the project; this also includes	The presentation presents the underlying the problems of the project, however lacks clarity the proposed solution, including a presentation of the	Does not adequately describe the underlying problem of the project. Poorly presented or missing information about the proposed solution, and or

	outlining the main features of your system and how they work; • Describes and illustrates of the system architecture. This may also include a discussion of: Any external APIs used; 3rd-party Libraries; UI frameworks, etc. • Finally, reflects on your experience while conducting the project. This includes: identifying your main challenges; discussion about what you have learnt; as well as any comments and feedback for potential improvements. Appropriately and adequately answers questions related to your project in general	main "features" of the project. Reasonable but not sufficiently clear presentation of the system architecture. Minimal mention of supporting 3rd-party libraries, APIs, frameworks, etc.	insufficient discussion about the main features of the system. Very brief of no mention about supporting libraries, 3rd-party libraries, APIs, frameworks. Does not or very briefly reflects on experience. Information is not useful.
Review of other group ***[25%]***	Comments provided are suitable. This means, for a given presentation, the reviewer is required to deliberate and formulate constructive feedback. Both positive and/or negative with concise justification.	Feedback is provided but no thoroughly explained. In particular, constructive criticism should be accompanied a brief yet detailed justification and feedback for improvement.	No or very little feedback is provided. And/or comments are relatively vague does not justify the points of potential improvements.

4. Submission Deadlines:

Diagrams (Week8): Monday, 19th of July 2021 17:59.
Class Presentation – (Week 9): (schedule will be posted beforehand).
Peer review (Week 10): Monday, 2nd of August 2021 17:59 (Peer Review Group Matching will be posted when presentation schedule is announced)

5. Submission Guidelines

Submission of this phase will be directly onto Microsoft Teams. Please follow the guidelines as in all previous phases. This means, upload the PDF file in the "Deliverable submissions" folder in the "Files" Tab. For **the Design**, each Group must upload the design Diagrams (Entity-Relationship/UML Diagram and Architectural Diagram) as a PDF file with the title (GroupX_Diagrams). For the **Peer Review,** each

student uploads a PDF file with the title **"zID_Peer Review of Group X"** –zID is your student ID and X is the reviewed group number.

Usual late penalties apply for late submissions; albeit please ensure **not to be late**, and abide by the dates above. This is important in order to facilitate the smooth running and coordination of the review process. Otherwise, please feel free to contact your mentors, in order to discuss any further details.

*****Note***** We assume **equal contribution** by the Group members for all deliverables. Please try to motivate and follow up with each other (we recommend using some project tracking tool like Trello) to keep that in motion. In the instance that equal contribution is not satisfied then we will request each Group member to provide their contribution for the deliverable and the mark will be distributed accordingly. Please feel free to discuss with your mentor and/or course teaching team if you have any concern about this.